

REMARKS

Entry of the foregoing, reexamination and further and favorable reconsideration of the subject application in light of the following remarks, pursuant to and consistent with 37 C.F.R. § 1.114, are respectfully requested.

The Office Action Summary correctly indicates that claims 10, 11, 13, 30, and 32-36 were pending in the application and stand rejected.

The independent claims have been amended to recite that said dsRNA or siRNA brings about a decreased growth, development, reproduction or survival of said insect when injected therein as compared to said insects injected with buffer without said dsRNA or siRNA. Support for the amendment can be found throughout the specification.

Claims 32-34 have been canceled without prejudice or disclaimer and reintroduced as new claims 37-39 to rectify a formality in claim numbering.

No prohibited new matter has been introduced by way of the above amendments. Applicants reserve the right to file a continuation or divisional application on subject matter canceled by way of this Amendment.

Claim Objections

Claims 32-33 were objected to for dependence on a later independent claim. Claims 32-34 have been canceled and reintroduced at the end of the claims listing to correct the issue.

Rejection Under 35 U.S.C. § 112, First Paragraph (Written Description)

Claims 10, 11, 13, 30 and 35-36 stand rejected under 35 U.S.C. § 112 as allegedly failing to comply with the written description requirement, for the reasons previously made of record.

The Examiner has previously alleged that the specification does not describe essential regions of the DNA of SEQ ID NO: 5, nor any polynucleotide sequence that has at least 70-90% identity to SEQ ID NO:5 and being a target for controlling the pest, except for SEQ ID NO:5. In support of this contention, the Examiner has alleged that SEQ ID NOS: 5 and 6 are 95% identical but that injection of dsRNA of SEQ ID NO:6 does not result in higher mortality, citing page 33, Figure 1.

The allegation is in error because the specification teaches, for example, on page 35, second paragraph from the bottom, that: “A similar experimental setup with *M. persicae* aphids and a dsRNA based on the above *M. persicae* eIF1A sequence (SEQ ID NO:6) confirms that a significant mortality is obtained when feeding these aphids naked, unpackaged dsRNA molecules in their diet.” (emphasis added) Thus, the application as filed did demonstrate that the eIF1A sequence of SEQ ID NO: 6 is a useful sequence to target with RNAi constructs in the feed of *M. persicae*, to bring about a decreased growth, decreased development, decreased reproduction or decreased survival of a plant sap-sucking insect as claimed. No contrary conclusion can or should be made from the injection experiment discussed on page 31 of the specification. The claims are directed methods based on modification of feed and/or diet, **not injection**.

Contrary to the allegation of the Office, the specification provides a plurality of examples of effective target genes within the range of sequence identity recited in the claims. When the foregoing is combined with the fundamental understanding in the art that

sequences having a high degree of homology to an essential gene can be expected to have similarly essential functionality, and that the effectiveness of dsRNA does not require perfect identity to a target sequence, but rather is generally tolerant of a degree of sequence variation, a person of ordinary skill would have appreciated that the inventors were in possession of the full range of the claimed invention.

Nevertheless, without acceding to any allegation of the rejection, the independent claims have been amended to recite that said dsRNA or siRNA brings about a decreased growth, development, reproduction or survival of said insect when injected therein as compared to said insects injected with buffer without said dsRNA or siRNA. Thus, the effectiveness of the method is recited as an explicit element of the claims.

For at least the forgoing reasons, withdrawal of the rejection is appropriate and is requested.

CONCLUSION

In view of the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order. Such action is earnestly solicited.

In the event that there are any questions relating to this application, it would be appreciated if the Examiner would telephone the undersigned concerning such questions so that prosecution of this application may be expedited.

The Director is hereby authorized to charge any appropriate fees that may be required by this paper, and to credit any overpayment, to Deposit Account No. 02-4800.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: June 28, 2010

By: /Christopher L North/
Christopher L. North
Registration No. 50433

Customer No. 21839
P.O. Box 1404
Alexandria, VA 22313-1404
703 836 6620